(EDGE) and Universal Mobile Telecommunications Service (UMTS). New standards are still being defined, but it is believed that they will have similarities to the network behavior described herein, and it will also be understood by persons skilled in the art that the embodiments described herein are intended to use any other suitable standards that are developed in the future. The wireless link connecting the communication subsystem **804** with the wireless network **850** represents one or more different Radio Frequency (RF) channels, operating according to defined protocols specified for GSM/GPRS communications. With newer network protocols, these channels are capable of supporting both circuit switched voice communications and packet switched data communications.

Although the wireless network **850** associated with portable electronic device **210** is a GSM/GPRS wireless network in one example implementation, other wireless networks may also be associated with the portable electronic device **210** in variant implementations. The different types of wireless networks that may be employed include, for example, data-centric wireless networks, voice-centric wireless networks, and dual-mode networks that can support both voice and data communications over the same physical base stations. Combined dual-mode networks include, but are not limited to, Code Division Multiple Access (CDMA) or CDMA2000 networks, GSM/GPRS networks (as mentioned above), and third-generation (3G) networks like EDGE and UMTS. Some other examples of data-centric networks include WiFi 802.11, Mobitex™ and DataTAC™ network communication systems. Examples of other voice-centric data networks include Personal Communication Systems (PCS) networks like GSM and Time Division Multiple Access (TDMA) systems.

The main processor **802** also interacts with additional subsystems such as a random access memory (RAM) **806**, a flash memory **808**, the touch screen display **214**, an auxiliary input/output (I/O) subsystem **812**, a data port **814**, a speaker **818**, a microphone **820**, short-range communications **822**, an accelerometer **890** and other device subsystems **824** (including, but not limited to a camera and a device vibrator).

Some of the subsystems of the portable electronic device **210** perform communication-related functions, whereas other subsystems may provide "resident" or on-device functions. By way of example, the touch screen display **214** may be used for both communication-related functions, such as entering a text message for transmission over the network **850**, and device-resident functions such as a calculator or task list.

The portable electronic device **210** can send and receive communication signals over the wireless network **850** after required network registration or activation procedures have been completed. Network access is associated with a subscriber or user of the portable electronic device **210**. To identify a subscriber, the portable electronic device **210** requires a SIM/RUIM card **826** (i.e., Subscriber Identity Module or a Removable User Identity Module) to be inserted into a SIM/RUIM interface **828** in order to communicate with a network. The SIM card or RUIM **826** is one type of a conventional "smart card" that can be used to identify a subscriber of the portable electronic device **210** and to personalize the portable electronic device **210**, among other things. Without the SIM card **826**, the portable electronic device **210** is not fully operational for communication with the wireless network **850**. By inserting the SIM card/RUIM **826** into the SIM/RUIM interface **828**, a subscriber can access all subscribed services. Services may include: web browsing and messaging such as e-mail, voicemail, Short Message Service (SMS), and Multimedia Messaging Services (MMS). More advanced services may include: point of sale, field service and sales force automation. The SIM card/RUIM **826** includes a processor and memory for storing information. Once the SIM card/RUIM **826** is inserted into the SIM/RUIM interface **828**, it is coupled to the main processor **802**. In order to identify the subscriber, the SIM card/RUIM **826** can include some user parameters such as an International Mobile Subscriber Identity (IMSI). An advantage of using the SIM card/RUIM **826** is that a subscriber is not necessarily bound by any single physical mobile device. The SIM card/RUIM **826** may store additional subscriber information for a mobile device as well, including datebook (or calendar) information and recent call information. Alternatively, user identification information can also be programmed into the flash memory **808**.

According to a preferred embodiment, the portable electronic device **210** is a battery-powered device and includes a battery interface **832** for receiving one or more rechargeable batteries **830**. In at least some embodiments, the battery **830** can be a smart battery with an embedded microprocessor. The battery interface **832** is coupled to a regulator (not shown), which assists the battery **830** in providing power V+ to the portable electronic device **210**. Although current technology makes use of a battery, future technologies such as micro fuel cells may provide the power to the portable electronic device **210**.

The portable electronic device **210** also includes an operating system **834** and software components **836** to **846**, **895** which are described in more detail below. The operating system **834** and the software components **836** to **846**, **895** that are executed by the main processor **802** are typically stored in a persistent storage such as the flash memory **808**, which may alternatively be a read-only memory (ROM) or similar storage element (not shown). Those skilled in the art will appreciate that portions of the operating system **834** and the software components **836** to **846**, **895** such as specific device applications, or parts thereof, may be temporarily loaded into a volatile store such as the RAM **806**. Other software components can also be included, as is well known to those skilled in the art.

The subset of software applications **836** that control basic device operations, including data and voice communication applications, will normally be installed on the portable electronic device **210** during its manufacture. Other software applications include a message application **838** that can be any suitable software program that allows a user of the portable electronic device **210** to send and receive electronic messages. Various alternatives exist for the message application **838** as is well known to those skilled in the art. Messages that have been sent or received by the user are typically stored in the flash memory **808** of the portable electronic device **210** or some other suitable storage element in the portable electronic device **210**. In at least some embodiments, some of the sent and received messages may be stored remotely from the portable electronic device **210** such as in a data store of an associated host system that the portable electronic device **210** communicates with.

The software applications can further include a device state module **840**, a Personal Information Manager (PIM) **842**, and other suitable modules (not shown). The device state module **840** provides persistence, i.e., the device state module **840** ensures that important device data is stored in persistent memory, such as the flash memory **808**, so that the data is not lost when the portable electronic device **210** is turned off or loses power.

The PIM **842** includes functionality for organizing and managing data items of interest to the user, such as, but not limited to, e-mail, contacts, calendar events, voicemails,